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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/682,164	10/08/2003	Andrew W. Wilson	ADAPP166A	8223
25920	7590	08/31/2006	EXAMINER	
MARTINE PENILLA & GENCARELLA, LLP			NGUYEN, TANH Q	
710 LAKEWAY DRIVE			ART UNIT	
SUITE 200			PAPER NUMBER	
SUNNYVALE, CA 94085			2182	

DATE MAILED: 08/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/682,164

Applicant(s)

WILSON ET AL.

Examiner

Tanh Q. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,6-10 and 18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,6-10 and 18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Terminal Disclaimer

1. The terminal disclaimer filed on June 21, 2006 disclaiming the terminal portion of any patent granted on this application, which would extend beyond the expiration date of US Patent No 6,651,117 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Claim Objections

2. Claims 1, 2, 18 are objected to because of the following informalities:

“software layers” in line 2 of claim 1 should be replaced with “software stack layers” for clarity and consistency,

“being” in line 9 of claim 1 should be replaced with “is”,

“network stack layer” in lines 3-4 of claim 2 should be replaced with “software stack layer” for clarity and consistency,

“software layers” in line 2 of claim 18 should be replaced with “software stack layers” for clarity and consistency,

“a memory address pointers” in line 6 of claim 18 should be replaced with “memory address pointers”.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall

set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-3 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contain subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 1 recites a network stack interface comprising a header portion, a buffer descriptor, a first software stack layer. In accordance with sections [0043], [0045] and [0049] on pages 12-13 of applicant's disclosure, a network stack 50 includes a plurality of software layers [see FIG. 2], and a network stack interface (or SID) includes a header portion and a header descriptor [see FIG. 3]. The network stack interface, therefore, does not comprise a first software stack layer.

5. Claims 1-3 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claims contain subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 1 recites "the buffer descriptor being one of a plurality of buffer descriptors that defines the data that is common to the plurality of buffer descriptors, and the plurality of buffer descriptors define transport layer header data".

FIG. 4 shows a plurality of buffer descriptors [133, 136, 138, 142, 144, 146, 156, 158, 160, 164] with each of buffer descriptors [133, 138, 146, 158, 164] defining the data that is common to buffer descriptors [133, 138, 146, 158, 164], i.e. data in buffer

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132, and each of buffer descriptors [142, 156, 160] defining transport layer header data [STP HDR 140, 154, 162]. Since none of the buffer descriptors defining the data can be considered as a buffer descriptor defining transport layer header data, and since the transport layer header data does not define data that is common to the plurality of buffer descriptors, the above limitation is not enabled by the disclosure.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

7. Claims 6-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 6-10 depend either directly or indirectly on claim 5, which is cancelled. Since the scope of claims 6-10 cannot be clearly determined, and since it would require a great deal of speculation by the examiner to reject these claims, no art rejection was made to claims 6-10.

8. Note also that claim 1 recites "data" and "transport layer header data", which are interpreted to be two different types of data - as there is no recitation in the claim for the data to only include transport layer header data.

The rejections that follow are based on the examiner's best interpretation of the claims.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1-3, 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Aditya et al. (US 5,729,681).

11. As per claim 1, Aditya teaches a network stack interface for communication between software layers [30, FIG. 2; 24, FIG. 1] during network storage data transfer, the network stack interface comprising:

a header portion [TCB 38, TxCB 62 - FIG. 2; col. 2, lines 61-62; col. 7, lines 22-24] defining characteristics of the network stack interface [FIG. 3; FIG. 5; col. 4, lines 9-20; col. 4, lines 36-52]; and

a buffer descriptor [fragment descriptors 52, 54, 56 of FIG. 2; FIG. 4; col. 4, lines 21-35; TDBs of FIG. 2; FIG. 6; col. 4, lines 53-67] defining data [a frame: col. 3, lines 20-27], the buffer descriptor including a memory address pointer to the data [53, 55, 57; 65, 67, 69 of FIG. 2], wherein information and the memory address pointer is passed between software stack layers via the network stack interface [col. 3, line 56-col. 4, line 8];

a first software stack layer creates [36, 60 - FIG. 2] the network stack interface and passes the network stack interface to another software stack layer [60, 36 - FIG. 2], and the buffer descriptor is one of a plurality of buffer descriptors [fragment descriptors

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52, 54, 56 of FIG. 2; FIG. 4; col. 4, lines 21-35; TDBs of FIG. 2; FIG. 6; col. 4, lines 53-67] that defines the data that is common to the plurality of buffer descriptors [transmit data buffers 42, 44, 46 for a frame of data: col. 3, lines 20-27], and the plurality of buffer descriptors define transport layer header data [TCB, fragment structures, transmit buffers defining a layer for transmitting data [col. 2, lines 54-58]; TxCB, TDBs defining another layer for transmitting data [col. 3, lines 50-52] - hence making up transport layer (i.e. transmission layer) header data].

12. As per claim 2, Aditya the header portion includes a common header portion [80, FIG. 3; col. 4, lines 8-12] and a layer specific header portion [82, 84 - FIG. 3; col. 4, lines 12-16], the specific header portion defining characteristics utilized by a particular related software (network) stack layer [defining the characteristics of the lower layer protocol].

13. As per claim 3, Aditya teaches each buffer descriptor further includes buffer length data, the buffer length data defining a size for the data referenced by the memory address pointer [col. 4, lines 25-29; col. 4, lines 57-58].

14. As per claim 18, Aditya teaches a network stack interface for communication between software layers [30, FIG. 2; 24, FIG. 1] during network storage data transfer, the network stack interface comprising:

a header portion [TCB 38, TxCB 62 - FIG. 2; col. 2, lines 61-62; col. 7, lines 22-24] defining characteristics of the network stack interface [FIG. 3; FIG. 5; col. 4, lines 9-20; col. 4, lines 36-52]; and

a plurality of buffer descriptors [fragment descriptors 52, 54, 56 of FIG. 2; FIG. 4;

col. 4, lines 21-35; TDBs of FIG. 2; FIG. 6; col. 4, lines 53-67], each buffer descriptor defining common data [transmit data buffers 42, 44, 46 for a frame of data: col. 3, lines 20-27], the plurality of buffer descriptors including memory address pointers [53, 55, 57; 65, 67, 69 of FIG. 2] to the common data, wherein information is passed between software stack layers via the network stack interface [col. 3, lines 56-67], wherein the buffer descriptors further include buffer length data [96, FIG. 4; 126, FIG. 6], the buffer length data defining a size for the common data referenced by the memory address pointers [col. 4, lines 25-29; col. 4, lines 57-58].

Response to Arguments

15. Applicant's arguments with respect to pending claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

16. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tanh Q. Nguyen whose telephone number is 571-272-4154. The examiner can normally be reached on M-F 9:30AM-7:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Huynh can be reached on 571-272-4147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



August 29, 2006

TQN
August 29, 2006